

EXHIBIT 2

**UNITED STATES DISTRICT COURT
WESTERN DISTRICT OF TEXAS
WACO DIVISION**

MV3 PARTNERS LLC,

Plaintiff,

v.

ROKU, INC.,

Defendant.

Civil Action No.: W-6:18-cv-00308-ADA

JURY TRIAL DEMANDED

ROKU'S PRELIMINARY INVALIDITY CONTENTIONS

Pursuant to the Scheduling Order (Dkt. 51), Roku hereby serves its preliminary invalidity contentions on MV3 for claims 1, 2, 3, 5, 6, 15, 21, 23, 25, 29, 30, 31, 32, 33, 34, 35, 37, 38, 47, 53, 55, 56, 57, 59, and 61 (Asserted Claims) of U.S. Patent No. 8,863,223.

Roku is providing: (1) charts setting forth where in each currently known item of prior art each element of the Asserted Claims are found; (2) an identification of any limitations Roku contends is indefinite or lacks written description or enablement under section 112; and (3) an identification of any claims Roku contends are directed to ineligible subject matter under section 101. In addition, Roku is concurrently producing (1) all prior art referenced in the invalidity contentions, (2) technical documents sufficient to show operation of the Accused Products, and (3) summary, annual sales information for the Accused Products for the last two years.

The following contentions are subject to revision and amendment in light of further investigation and discovery, any claim construction order related to the Asserted Claims, and/or the review and analysis of expert witnesses. Roku will timely amend these preliminary invalidity contentions as specified in Dkt. 51 should it become necessary.

I. INVALIDITY CONTENTIONS

The Asserted Claims are invalid under one or more of pre-AIA 35 U.S.C. §§ 102, 103 and 112 for at least the reasons identified below.

A. Anticipation and Obviousness

1. Identification of Prior Art

Roku identifies the following prior art that renders one or more of the Asserted Claims anticipated and/or obvious. Each prior art reference is identified by its number, country of origin, and date of issue/publication. The first named inventor or author is also identified for each prior art reference. The date of each prior art reference qualifies it under one or more provisions of 35 U.S.C. §§ 102 and/or 103 (pre-AIA). The alignment of these contentions with

particular sections of 35 U.S.C. §§ 102 and/or 103 is based upon currently-available information and subject to revision as further information becomes available in discovery. For example, Roku contends that the references identified below qualify as prior art under 35 U.S.C. § 102(a), § 102(e), § 102(g)(2) and/or § 103, to the extent that they do not qualify as prior art under 35 U.S.C. § 102(b).

There may be offers for sale and public uses of products that qualify as prior art under 35 U.S.C. § 102, including but not limited to the technology described in the prior art patents, publications, and manuals identified herein. Details regarding the third party products identified on this chart (Apple TV (1st Generation), PlayStation 3, Xbox 360 Arcade Edition, Xbox 360 Elite Edition, Nokia N80, Toshiba Pocket PC e800-805) may be within the possession of third parties from whom Roku has not yet received discovery, and Roku is not relying only on the manuals/user guides for these products, as the products themselves may internally include invalidating functions and components not discernable from the publicly-available manuals. Roku may amend these Invalidity Contentions to reflect offers for sale and public uses and additional content from the products themselves at a later date.

Ex.	Author/Inventor and Number	Country	Date of Issue/Pub./Launch
1	Al-Karmi - US 2008/0134278	United States	Jun. 5, 1008
2	Archos DVR Station Gen 5 Ver. 3	United States	2007
3	Archos Gen 5 User Manual Ver. 3	United States	2007
4	Archos Pocket Video Recorder AV 400 Series User Manual	United States	2003
5	Archos Pocket Video Recorder AV 420 Series User Manual	United States	2005
6	Austerlitz - US 2008/0263621	United States	Oct. 23, 2008
7	Bailey - US 2008/0106639	United States	May 8, 2008

8	Balram - US 2008/0198264	United States	Aug.21, 2008
9	Balram – Adaptive Digital Video Format Converters...	United States	May, 2007
10	Bennett - US 2006/0031889	United States	Feb. 9, 2006
11	Bernard - US 5,497,339	United States	Mar.5, 1996
12	Binder - US 2011/0013759	United States	Jan. 20, 2011
13	Busse - US 2009/0133090	United States	May 21, 2009
14	Buttet - US 7,158,757	United States	Jan. 2, 2007
15	Campagna - US 2009/0300694	United States	Dec. 3, 2009
16	Carmel (I) - US 5,841,432	WIPO	Nov. 24, 1998
17	Carmel (II) - WO 99/10836	WIPO	Mar. 4, 1999
18	Chang (I) - US 2009/0023395	United States	Jan. 22, 2009
19	Chang (II) - US 2009/0023475	United States	Jan. 22, 2009
20	Chaudhri - US 2009/0061841	United States	Mar. 5, 2009
21	DeLine - US 2005/0064860	United States	Mar. 24, 2005
22	DTR-5.6 - User Manual	United States	2005
23	DTR-8.9 DTR-9.9 - Onkyo USA	United States	2008
24	Fadell - US 2004/0224638	United States	Nov. 11, 2004
25	Fang - US 2007/0139513	United States	Jun. 21, 2007
26	Haeusel - US 2007/0130592	United States	Jun. 7, 2007
27	Hardacker - US 7,020,121	United States	Mar. 28, 2006
28	Hayakawa - US 2003/0137609	United States	Jul. 24, 2003
29	Heinonen - US 7,312,813	United States	Dec. 25, 2007
30	Hepburn - US 2009/0291760	United States	Nov. 26, 2009
31	Jaffe - US RE45,320	United States	Jan. 6, 2015
32	Jaggers - US 7,013,163	United States	Mar. 14, 2006
33	Jeong - KR 2009/0093177	Korea	Sept. 2, 2009
34	Jung - KR 2007/0119445	Korea	Dec. 20, 2007
35	Kanumuri - US 2009/0046995	United States	Feb. 19, 2009
36	Kim - KR 2006/0023374	Korea	Mar. 14, 2006

37	Kuo - US 6,902,427	United States	Jun. 7, 2005
38	Lee - Techniques for Flexible...	United States	Jan. 2007
39	Mahini - US 2007/0021148	United States	Jan. 25, 2007
40	Martin - US 7,236,209	United States	Jun. 26, 2007
41	Matsubara - EP 1 175 069	Europe	Jan. 23, 2002
42	Mukerji - US 2009/0293088	United States	Nov. 26, 2009
43	Nam - US 7,480,484	United States	Jan. 20, 2009
44	Paik - US 7,634,794	United States	Dec. 15, 2009
45	Palin - US 7,580,005	United States	Aug. 25, 2009
46	Pasqualino - US 2004/0158873	United States	Aug. 12, 2004
47	Reynolds - US 7,295,608	United States	Nov. 13, 2007
48	Seaman - US 2004/0223614	United States	Nov. 11, 2004
49	Solecki - US 7,239,428	United States	Jul. 3, 2007
50	Stone - US 7,920,623	United States	Apr. 5, 2011
51	Takeda - US 6,781,635	United States	Aug. 24, 2004
52	Targus ExpressCard	United States	2007
53	Toyama - US 2006/0259942	United States	Nov. 16, 2006
54	Turner - US 2003/0128197	United States	Jul. 10, 2003
55	Wang (I) - US 7,899,492	United States	Mar. 1, 2011
56	Wang (II) - US 7,957,733	United States	Jun. 7, 2011
57	Wang (III) - US 8,050,711	United States	Nov. 1, 2011
58	Wright-Riley - US 2009/0163139	United States	Jun. 25, 2009
59	Xiao - US 6,663,420	United States	Dec. 16, 2003
60	Yoo - KR 2004-0004307	Korea	Jan. 13, 2004
61	Roku DVP (N1000) User Guide	United States	2008
62	Apple TV (1 st Generation) Setup Guide	United States	2007
63	PlayStation 3 Quick Reference	United States	2006
64	Xbox 360 Arcade Edition Manual	United States	2007
65	Xbox 360 Elite Edition Manual	United States	2007

66	Nokia N80 User Guide	United States	2006
67	Toshiba Pocket PC e800-805 User's Guide	United States	2003

2. Claim Charts

The claim charts attached as Exhibits 1–67 identify where in the cited references or prior art products each element of each Asserted Claim is disclosed. Roku has endeavored to identify exemplary portions of the references/products. The references and products, however, may contain additional disclosure for the claim limitations for which Roku cites them or for other limitations of the asserted claims that may be relied upon in the future.

As set forth in the claim charts, each of the asserted claims of the '223 patent is invalid under 35 U.S.C. §§ 102, 103. Each of the claimed elements alone, or in combination, were well known to those of ordinary skill in the art before the alleged priority date of the '223 patent. Roku contends that each prior art reference identified above and in the attached claim charts anticipates the asserted claims under 35 U.S.C. § 102 and/or renders the asserted claims invalid as obvious under 35 U.S.C. § 103 based on the reference alone, in combination with the knowledge of a person of ordinary skill in the art, or in combination with another prior art reference.

Roku contends that the Asserted Claims are invalid as obvious over each disclosed prior art reference in combination with any one or more other prior art references. To the extent MV3 may argue that a particular prior art reference does not disclose a limitation, it would have been obvious to a person of ordinary skill in the art to combine the identified reference and another reference that teaches this limitation. For any reference that lacks disclosure of a claim limitation, any other reference(s) that has that disclosure can be combined with that reference. Each prior art reference may also be combined with information known to persons skilled in the art at the time of the alleged invention to render the claims invalid as obvious.

A person of ordinary skill in the art would have been motivated to combine any of the references identified above and in the charts with any other reference(s) for numerous reasons at the relevant time. In general, the reason, motivation, or suggestion to modify or combine the references in the manner claimed can be found in the explicit and/or implicit teachings and the prior art as a whole, the general knowledge of those skilled in the art, including knowledge of trends in the field and knowledge that the art is of special interest or importance in the field, and from the fact that the references are in the same or similar field of endeavor and/or seek to solve a common problem.

A person having ordinary skill in the art would have been motivated to combine any of the references identified above and in the charts, because, as specifically disclosed in the charts, all of the claim elements were identified, predictable solutions and techniques frequently applied in the relevant field of technology. The '223 patent simply arranges old elements with each performing the same function it had been known to perform and yields no more than one would expect from such an arrangement. Each of the elements in the asserted claims were well-known as of the priority date of the '223 patent.

3. Secondary Considerations

As demonstrated in the attached charts, the claims of the '223 patent are obvious. Secondary considerations of nonobviousness cannot overcome a strong *prima facie* case of obviousness. Where an alleged invention represents nothing more than the predictable use of prior art elements according to their established functions, secondary considerations are inadequate to establish nonobviousness as a matter of law. Accordingly, even if secondary factors are considered, they do not overcome a finding of obviousness.

B. Invalidity Under 35 U.S.C. § 112

To comply with the definiteness requirement of 35 U.S.C. § 112, ¶ 2, the claims must “particularly point[] out and distinctly claim[] the subject matter which the inventor [] regards as [the] invention.” To comply with the enablement requirement of 35 U.S.C. § 112, ¶ 1, the patent must enable or teach one skilled in the field of the invention to make and use the full scope of the claimed inventions without undue experimentation. To comply with the written description requirement of 35 U.S.C. § 112, ¶ 1, the patent specification must describe the claimed invention in sufficient detail that one skilled in the art can reasonably conclude that the inventor had possession of the claimed invention.

The claims of the Patents-in-Suit are invalid under 35 U.S.C. § 112. For example:

- Claims 1 and 32 and any Asserted Claims that depend from them are invalid because the specification fails to provide an adequate written description of “a video processor configured to receive and process the media content from the mobile device input, the video processor including adaptive circuitry to process the media content transmitted from unicast and multicast broadcasts, and the video processor including circuitry and instructions operable to process a predefined protocol stack of video packets forming at least a portion of the media content.”
- Claim 30 and any Asserted Claims that depend from it are invalid because the specification fails to provide an adequate written description of “receiving and processing, by a video processor, the first media content from the mobile computing device, the video processor including adaptive circuitry to process the media content transmitted from unicast and multicast broadcasts, and the video processor including circuitry and instructions operable to process a predefined protocol stack of video packets forming at least a portion of the first media content.”

- Claims 1, 30, and 32 and any Asserted Claims that depend from them are invalid because the specification fails to provide an adequate written description of “querying the mobile computing device to determine the first size format.”
- Claims 1, 30, and 32 and any Asserted Claims that depend from them are invalid because the specification fails to provide an adequate written description of “querying the/a display device.”
- Claims 1, 30, and 32 and any Asserted Claims that depend from them are invalid because the specification fails to provide an adequate written description of “authenticating the validity of a user associated with the mobile computing device, determining, based on the validity of the user, that the received first media content is permitted to be provided to the display device.”
- Claims 1, 30, and 32 and any Asserted Claims that depend from them are invalid because the specification fails to provide an adequate written description of “increasing a total number of horizontal and vertical pixels in each video frame of the series of digital video frames so that pixel dimensions in each video frame match the native display resolution of the second size format of the display device.”
- Claims 1, 30, and 32 and any Asserted Claims that depend from them are invalid because the specification fails to enable at least the terms/phrases identified above with respect to written description.

C. Invalidity Under 35 U.S.C. § 101

Roku is not currently alleging that the Asserted Claims are directed to unpatentable subject matter.

Respectfully submitted,

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CERTIFICATE OF SERVICE

I hereby certify that on April 3, 2019, the foregoing document was served by email to all counsel of record.

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